

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 07, 2016

Mike Butler EPCOR Water PO Box 370

Edgewood, NM 87015 TEL: (505) 228-6233

**FAX** 

RE: EWWTP OrderNo.: 1512B85

#### Dear Mike Butler:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/29/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="https://www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report** Lab Order 1512B85

#### Hall Environmental Analysis Laboratory, Inc. Date Reported: 1/7/2016

**CLIENT: EPCOR Water** Client Sample ID: Effluent

Project: **EWWTP** Collection Date: 12/29/2015 1:00:00 PM Lab ID: 1512B85-001 Matrix: AQUEOUS Received Date: 12/29/2015 2:38:00 PM

Analyses Result **RL Qual Units DF** Date Analyzed Batch SM5210B: BOD Analyst: SMS Biochemical Oxygen Demand DO Depletion<2.0 2.0 mg/L 1/4/2016 3:34:00 PM 23016 SM 9223B FECAL INDICATOR: E. COLI MPN Analyst: MRA E. Coli <1 1.000 CFU/100ml 12/30/2015 5:47:00 PM 22999 **EPA METHOD 300.0: ANIONS** Analyst: LGT Nitrogen, Nitrite (As N) ND 0.10 mg/L 12/29/2015 11:50:43 PM A31141 Nitrogen, Nitrate (As N) 1.4 0.10 mg/L 12/29/2015 11:50:43 PM A31141

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 4 J
- P Sample pH Not In Range
- RLReporting Detection Limit

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1512B85

07-Jan-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: **PBW**  Batch ID: A31141

RunNo: 31141

Prep Date:

Analysis Date: 12/29/2015

SeqNo: 953076

Units: mg/L

Analyte

Result **PQL**  SPK value SPK Ref Val %REC LowLimit

HighLimit

**RPDLimit** %RPD

**RPDLimit** 

Qual

Qual

Nitrogen, Nitrite (As N) Nitrogen, Nitrate (As N)

0.10 ND ND 0.10

SampType: LCS

TestCode: EPA Method 300.0: Anions

LowLimit

Sample ID LCS Client ID: LCSW

Batch ID: A31141

RunNo: 31141

%REC

%RPD

Prep Date:

Analysis Date: 12/29/2015

2.6

1.000

2.500

SeqNo: 953077

Units: mg/L HighLimit

Analyte Nitrogen, Nitrite (As N) Nitrogen, Nitrate (As N)

SPK value SPK Ref Val **PQL** Result 1.0 0.10

0.10

99.8 0 104 0

90 110 110 90

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix S
- Analyte detected in the associated Method Blank В
- Ε Value above quantitation range
- Analyte detected below quantitation limits
  - Sample pH Not In Range
- Reporting Detection Limit

Page 2 of 4

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1512B85

07-Jan-16

**Client:** 

**EPCOR Water** 

**Project:** 

**EWWTP** 

Sample ID MB-23016

SampType: MBLK

TestCode: SM5210B: BQD

Client ID: PBW

Batch ID: 23016

RunNo: 31228

Prep Date: 12/30/2015 Analysis Date: 1/4/2016

SeqNo: 956201

Units: mg/L

Qual

Analyte Biochemical Oxygen Demand

Client ID:

SPK value SPK Ref Val PQL

2.0

%REC LowLimit

HighLimit

%RPD **RPDLimit** 

Sample ID MB-23016 PBW

SampType: MBLK Batch ID: 23016

Result

Result

ND

180

Result

180

ND

TestCode: SM5210B: BOD

RunNo: 31228

Units: mg/L

HighLimit

Analyte

Prep Date: 12/30/2015 Analysis Date: 1/4/2016

SeqNo: 956202

%RPD

**RPDLimit** 

Qual

**Biochemical Oxygen Demand** 

Sample ID LCS-23016

SampType: LCS

TestCode: SM5210B: BOD

RunNo: 31228

137

Analyte

Client ID:

Prep Date:

Client ID:

Prep Date: 12/30/2015

Batch ID: 23016 Analysis Date: 1/4/2016

SeqNo: 956203

Units: mg/L **HighLimit** 

**RPDLimit** 

Biochemical Oxygen Demand

Result PQL

2.0

198.0

198.0

SPK value SPK Ref Val

PQL

2.0

SPK value SPK Ref Val %REC

SPK value SPK Ref Val %REC LowLimit

LowLimit 89.5

75.9

%RPD

Qual

Qual

Sample ID LCSD-23016

SampType: LCSD Batch ID: 23016 TestCode: SM5210B: BOD

%REC

90.3

RunNo: 31228

0.843

Analyte Biochemical Oxygen Demand

12/30/2015

LCSS02

Analysis Date: 1/4/2016

**PQL** 

2.0

SeqNo: 956204

LowLimit

75.9

Units: mg/L **HighLimit** 

137

%RPD

**RPDLimit** 

20

**Oualifiers:** 

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Ε Value above quantitation range

Reporting Detection Limit

Analyte detected below quantitation limits

P Sample pH Not In Range Page 3 of 4

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1512B85 07-Jan-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-22999

SampType: MBLK

TestCode: SM 9223B Fecal Indicator: E. coli MPN

Client ID: PBW

Batch ID: 22999

RunNo: 31171

Prep Date: 12/29/2015

Analysis Date: 12/30/2015

SeqNo: 954236

SPK value SPK Ref Val %REC LowLimit

Units: CFU/100ml

HighLimit

%RPD

**RPDLimit** Qual

Analyte E. Coli

**PQL** 1.000

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Detection Limit

Page 4 of 4



Hall Environmental Analysis Laboratory
4901 Hawkins NE

Albuquerque. NM 87109

TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

### Sample Log-In Check List

Client Name: EPCOR-EDGEWOOD Work Orde	er Number/ 1512B85		RcptNo: 1	
	Inalic			
Received by/date:	19074! 3	<b>h</b>		
Logged By: Ashley Galippos 12/29/2015	2:38:00 PM	*		
Completed By: Ashley Gallegos 12/29/2015	3:07;31 PM ,	*		
Reviewed By: 0 12/24/15	a) 1541			
Chain of Custody				
1. Custody seals intact on sample bottles?	Yes 🗌	No 🗆	Not Present 🗹	
2. Is Chain of Custody complete?	Yes 🔽	No 🗌	Not Present 🗌	
3. How was the sample delivered?	Client			
<u>Log In</u>				
4. Was an attempt made to cool the samples?	Yes 🗹	No 🗆	NA 🗆	
** Andth dut mires illes sittens in Anna illa adissiones.	ديمة ليا	<del></del>	•	
5. Were all samples received at a temperature of >0° C to 6	5.0°C Yes □	No 🔽	na 🗆	
Sa	mples were collected the		chilled.	
6. Sample(s) in proper container(s)?	Yes 🗹	No 🗆		
7. Sufficient sample volume for indicated test(s)?	Yes 🔽	No 📋		
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗹	No 🗆		
9. Was preservative added to bottles?	Yes 🗌	No 🗹	NA 🗆	
10.VQA vials have zero headspace?	Yes 🗀	No Fi	No VOA Vials	
11. Were any sample containers received broken?	Yes 🗆	No 🗹		••
t it said my amiljio obitoliiolo iocoliod marteri			# of preserved bottles checked \	
12. Does paperwork match bottle labels?	Yes 😾	No 🗀	for pH: 😙 🖰	
(Note discrepancies on chain of custody)				>12 unless noted)
13. Are matrices correctly identified on Chain of Gustody?	Yes 🗹	No 🗆	Adjusted?	1 (1) - 7
14, is it clear what analyses were requested?	Yes 🗹	No 🗀		
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗌	Checked by:	
Special Handiing (if applicable)				
16. Was client notified of all discrepancies with this order?	Yes 🗔	No 🗆	NA 🗹	
Person Notified:	Date			
By Whom:	Via: 🔲 eMail 📋 F	Phone 🔲 Fax	in Person	
Regarding:	<del></del>			
Client Instructions:			<del> </del>	
17. Additional remarks:	-			
18. Cooler Information				
Cooler No Temp *C Condition Seal Intact S	eal No   Seal Date	Signed By		
1 7.8 Good Not Present				

Chain-of-Custody Record	Turn-Around Time:	HALL ENVIRONMENTAL
it: K. Sor J. Jakor	Standard 🗆 Rush	ANALYSIS LABORATORY
	Project Name:	www.hallenvironmental.com
ling Address: DOROK XV)	EWITP	4901 Hawkins NE - Albuquerque, NM 87109
100 100 100 1000	Project #:	Tel. 505-345-3975 Fax 505-345-4107
2007/002		Analy
ail or Fax#: Mbx + le - Gle De Com, Project Manage	Project Manager:	'eo')
QC Package: Standard □ Level 4 (Full Validation)	Mike Buther	1 (Gas 0 SIMS) 1 PCE 1 PCE
other	Sampler: M. Butle	1 \ O \(\text{G}\) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
(Đặ	Sample Temperature: 7.8	B (G) book hood hood hood hood hood hood hood h
ate Time Matrix Sample Request ID	Container Preservative HEAL No. Type and # Type	Air Bubbi STEX + M BOSTO (Sei ROST Pesi SCRA 8 M ROST Pesi ROST Pe
F	100-	
45 1000 E++ 14EMM		
ite: Time: Relinguished by:	Regeived by Halling Date 2 men	Kemarks:
ite: Time: Relinquished by:	Received by:	
if necessary, samples submitted to Hall Environmental may be subcontracted to orbig	subcontracted to obtain accredited laboratories. This serves as notice of	accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

		• • •



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 11, 2016

Mike Butler EPCOR Water PO Box 370

Edgewood, NM 87015 TEL: (505) 228-6233

**FAX** 

RE: EWWTP OrderNo.: 1512A24

#### Dear Mike Butler:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/22/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

Buly

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 1512A24 Date Reported: 1/11/2016

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EPCOR Water** 

Client Sample ID: Effluent

 Project:
 EWWTP
 Collection Date: 12/22/2015 9:30:00 AM

 Lab ID:
 1512A24-001
 Matrix: AQUEOUS
 Received Date: 12/22/2015 2:30:00 PM

RL Qual Units Analyses Result **DF** Date Analyzed Batch SM5210B: BOD Analyst: MRA **Biochemical Oxygen Demand** DO Depletion<2.0 2.0 mg/L 12/28/2015 12:41:00 PM 22936 SM 9223B FECAL INDICATOR: E. COLI MPN Analyst: MRA E. Coli <1 1.000 CFU/100ml 12/23/2015 4:57:00 PM 22930 **EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride 12/22/2015 10:01:58 PM R31049 43 10 mg/L SM2540C MOD: TOTAL DISSOLVED SOLIDS Analyst: KS **Total Dissolved Solids** 424 20.0 mg/L 12/29/2015 12:14:00 PM 22954 SM 4500 NORG C: TKN Analyst: CJS ND Nitrogen, Kjeldahl, Total 1.0 mg/L 1/8/2016 10:54:00 AM 23093

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### **Oualifiers:**

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1512A24

11-Jan-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sam	ple	iD	<b>A6</b>
	ρ.υ		

SampType: CCV\_6

TestCode: EPA Method 300.0: Anions

TestCode: EPA Method 300.0: Anions

LowLimit

90

**BatchQC** 

Batch ID: R31049

0.50

RunNo: 31049

Client ID: Prep Date:

Analysis Date: 12/22/2015

SeqNo: 949687

Units: mg/L

Analyte Chloride

Result

SPK value SPK Ref Val **PQL** 12.00

%REC 96.4

LowLimit **HighLimit** 110

%RPD **RPDLimit**  Qual

Sample ID A4

Client ID:

Prep Date:

**BatchQC** 

SampType: CCV\_4

RunNo: 31049

Batch ID: R31049

Analysis Date: 12/22/2015

SeqNo: 949699

Units: mg/L

Analyte Chloride

Result 4.6 POL

0.50

SPK value SPK Ref Val 5.000 0

%REC LowLimit 91.9

**HighLimit** 90 110 %RPD **RPDLimit** 

%RPD

%RPD

Qual

Sample ID A5

SampType: CCV\_5

TestCode: EPA Method 300.0: Anions RunNo: 31049

Prep Date:

Client ID: **BatchQC**  Batch ID: R31049

Result

Analysis Date: 12/22/2015

8.000

SeqNo: 949711

Units: mg/L

**RPDLimit** 

SPK value SPK Ref Val %REC HighLimit

110

Qual

Analyte Chloride

Sample ID MB

SampType: MBLK

TestCode: EPA Method 300.0: Anions RunNo: 31049

94.6

Client ID: Prep Date:

PBW

Batch ID: R31049 Analysis Date: 12/22/2015

**PQL** 

0.50

SeqNo: 949718

Units: mg/L HighLimit

**RPDLimit** Qual

Analyte Chloride

**PQL** Result ND 0.50

SampType: LCS

TestCode: EPA Method 300.0: Anions

Sample ID LCS Client ID: LCSW

Batch ID: R31049

RunNo: 31049

SPK value SPK Ref Val %REC LowLimit

Prep Date:

Analysis Date: 12/22/2015

5.000

SeqNo: 949719

Units: mg/L HighLimit

%RPD

Analyte

Result

SPK value SPK Ref Val PQL

%REC LowLimit 94.3

**RPDLimit** Qual

Chloride

0.50

TestCode: EPA Method 300.0: Anions

90 110

Sample ID A6

BatchQC

SampType: CCV\_6 Batch ID: R31049

**PQL** 

0.50

RunNo: 31049

Client ID: Prep Date:

Analysis Date: 12/22/2015

Result

12

SeqNo: 949722

98.2

Units: mg/L

HighLimit

110

Analyte

SPK value SPK Ref Val 12.00

%REC

LowLimit

90

%RPD

**RPDLimit** Qual

Page 2 of 7

Chloride

S

- **Oualifiers:** Value exceeds Maximum Contaminant Level.

  - R RPD outside accepted recovery limits
- Sample Diluted Due to Matrix D
- Not Detected at the Reporting Limit ND
- Holding times for preparation or analysis exceeded Н

% Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank В
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range Reporting Detection Limit RL

P

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1512A24

11-Jan-16

Client: Project:	EPCOR V EWWTP	Vater									
Sample ID	A4	SampT	ype: CC	CV_4	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	BatchQC	Batch	n ID: R3	31049	F	RunNo: 3	1049				
Prep Date:		Analysis D	ate: 1:	2/22/2015	5	SeqNo: 9	49734	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.7	0.50	5.000	0	93.0	90	110			
Sample ID	A5	SampT	ype: C0	CV_5	Tes	tCode: E	PA Method	300.0: Anions	;		
Client ID:	BatchQC	Batch	n ID: R3	31049	F	RunNo: 3	1049				
Prep Date:		Analysis D	ate: 1	2/22/2015	5	SeqNo: 9	49746	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		7.6	0.50	8.000	0	95.0	90	110			
Sample ID	A6	SampT	ype: C0	CV_6	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	BatchQC	Batch	n ID: R3	31049	F	RunNo: 3	1049				
Prep Date:		Analysis D	ate: 1	2/22/2015	5	SeqNo: 9	49758	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		12	0.50	12.00	0	97.8	90	110			
Sample ID	A4	SampT	ype: C0	CV_4	Tes	tCode: E	PA Method	300.0: Anions	<u> </u>		
Client ID:	BatchQC	Batch	n ID: R3	31049	F	RunNo: 3	1049				
Prep Date:		Analysis D	ate: 1	2/23/2015	\$	SeqNo: 9	49770	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.9	0.50	5.000	0	97.6	90	110			
Sample ID	A5	SampT	ype: C0	 CV_5	Tes	tCode: E	PA Method	300.0: Anions	;		
Client ID:	BatchQC	Batch	n ID: R3	31049	F	RunNo: 3	1049				
Prep Date:		Analysis D	ate: 1:	2/23/2015	\$	SeqNo: 9	49782	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		7.6	0.50	8.000	0	95.1	90	110			
Sample ID	A6	SampT	ype: C0	CV_6	Tes	tCode: E	PA Method	300.0: Anions	•		
Client ID:	BatchQC	Batch	ı ID: R3	1049	F	RunNo: 3	1049				
Prep Date:		Analysis D	)ate: 12	2/23/2015	5	SeqNo: 9	49790	Units: mg/L			

#### Qualifiers:

Analyte

Chloride

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

Result

12

**PQL** 

0.50

SPK value SPK Ref Val

12.00

- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

LowLimit

90

HighLimit

110

%RPD

**RPDLimit** 

Qual

E Value above quantitation range

%REC

98.2

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 3 of 7

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1512A24 11-Jan-16

Client:

**EPCOR Water** 

**Project:** 

**EWWTP** 

Sample ID MB-22936

SampType: MBLK

TestCode: SM5210B: BOD

Client ID:

PBW Batch ID: 22936 RunNo: 31105

Prep Date: 12/23/2015 Analysis Date: 12/28/2015

SeqNo: 951864

Units: mg/L

Analyte

Client ID:

Result **PQL** 2.0 SPK value SPK Ref Val

%REC LowLimit

HighLimit

%RPD **RPDLimit**  Qua!

Biochemical Oxygen Demand Sample ID MB-22936

SampType: MBLK

2.0

2.0

2.0

TestCode: SM5210B: BOD

Prep Date: 12/23/2015

Batch ID: 22936 Analysis Date: 12/28/2015 RunNo: 31105 SeqNo: 951865

Units: mg/L

Analyte

Result **PQL**  SPK value SPK Ref Val

%REC LowLimit

HighLimit

%RPD

**RPDLimit** 

Qual

Biochemical Oxygen Demand

Sample ID LCS-22936

SampType: LCS

230

ND

TestCode: SM5210B: BOD

RunNo: 31105

137

Prep Date:

12/23/2015

Batch ID: 22936

Analysis Date: 12/28/2015

SeqNo: 951866

Units: mg/L

Analyte Biochemical Oxygen Demand

Result PQL

SPK value SPK Ref Val %REC

LowLimit HighLimit 75.9

%RPD

**RPDLimit** 

Qual

Sample ID LCSD-22936

Client ID: LCSW

SampType: LCSD

TestCode: SM5210B: BOD

80.4

117

RunNo: 31105

Prep Date: 12/23/2015

Client ID: LCSS02

Batch ID: 22936

SeqNo: 951867

Units: mg/L

**RPDLimit** Quat

Analyte

Biochemical Oxygen Demand

Result POL

160

Analysis Date: 12/28/2015

198.0

198.0

SPK value SPK Ref Val %REC

LowLimit 75.9 **HighLimit** 137

%RPD 36.9

20

R

#### Qualifiers:

D

S

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded Н

% Recovery outside of range due to dilution or matrix

- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R

- Analyte detected in the associated Method Blank В
- Value above quantitation range Ε
- j Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit

Page 4 of 7

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1512A24

11-Jan-16

**Client:** 

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-22930

12/22/2015

SampType: MBLK

TestCode: SM 9223B Fecal Indicator: E. coli MPN

Client ID: PBW

Batch ID: 22930

RunNo: 31070

Analysis Date: 12/23/2015

SeqNo: 950623

Units: CFU/100ml

Qual

Analyte

Prep Date:

**PQL** 

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

**RPDLimit** 

E. Coli

1.000

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Ε Value above quantitation range
- J Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit

Page 5 of 7

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1512A24

11-Jan-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-22954

SampType: MBLK

TestCode: SM2540C MOD: Total Dissolved Solids

Client ID:

PBW

Batch ID: 22954

**PQL** 

RunNo: 31116

Prep Date: 12/24/2015

Analysis Date: 12/29/2015

SeqNo: 952026

Units: mg/L

**RPDLimit** 

Qual

Analyte

Result

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

%RPD

Total Dissolved Solids

ND 20.0

Sample ID LCS-22954 Client ID: LCSW

SampType: LCS

Prep Date: 12/24/2015

Batch ID: 22954 Analysis Date: 12/29/2015 RunNo: 31116

SeqNo: 952027

TestCode: SM2540C MOD: Total Dissolved Solids

Units: mg/L

HighLimit

Qual

Analyte

Result

SPK value SPK Ref Val

0

%REC 102

80

LowLimit

Total Dissolved Solids

1020

20.0

1000

120

**RPDLimit** 

**PQL** 

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded Н

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

Е Value above quantitation range

Analyte detected below quantitation limits J

Sample pH Not In Range

Р Reporting Detection Limit Page 6 of 7

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1512A24

11-Jan-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-23093

SampType: MBLK

TestCode: SM 4500 Norg C: TKN

Client ID: PBW

Batch ID: 23093

RunNo: 31335

Prep Date: 1/6/2016

Analysis Date: 1/8/2016

SeqNo: 959362

Units: mg/L

Analyte

**PQL** 

SPK value SPK Ref Val %REC LowLimit

HighLimit

**RPDLimit** 

Qual

Nitrogen, Kjeldahl, Total

Client ID: LCSW

ND 1.0

Sample ID LCS-23093

SampType: LCS Batch ID: 23093 TestCode: SM 4500 Norg C: TKN RunNo: 31335

SeqNo: 959363

LowLimit

Units: mg/L

%RPD

Analyte

Prep Date: 1/6/2016

Analysis Date: 1/8/2016

Result

SPK value SPK Ref Val %REC

101

HighLimit

**RPDLimit** 

Qual

Nitrogen, Kjeldahl, Total

0

120

%RPD

1.0

10.00

Page 7 of 7

D

- Qualifiers: Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix Н Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquorque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

#### Sample Log-in Check List

RoptNo: 1 Work Order Number: 1512A24 **EPCOR-EDGEWOOD** Client Name Received by/date: 12/22/2015 2:30:00 PM Ashley Galley Logged By: 12/22/2015 3:25:10 PM Completed By: Ashley Gallegos Reviewed By: Chain of Custody Not Present 🗹 Yes 1. Custody seals intact on sample bottles? Not Present Yes V 2. Is Chain of Custody complete? Client 3. How was the sample delivered? <u>Log in</u> NA 🗌 No 🗀 Yes V 4. Was an attempt made to cool the samples? NA 🗆 No 🔲 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗀 Yes V 6. Sample(s) in proper container(s)? No 🗌 Yes V 7. Sufficient sample volume for indicated test(s)? No 🗆 Yes 🔽 8. Are samples (except VOA and ONG) properly preserved? No 🗹 NA 🗌 Yes 9. Was preservative added to bottles? No VOA VIDIS V Yes 🗀 No 🗔 10. VOA vials have zero headspace? Yes 🗆 No 🗹 11. Were any sample containers received broken? # of preserved bottles checked No 🗆 for pH: Yes 🔽 12. Does paperwork match bottle labels? >12 unless noted) (Note discrepancies on chain of custody) Adjusted: No [ 13. Are matrices correctly identified on Chain of Custody? No 🗀 Yes 🔽 14, is it clear what enalyses were requested? No L Checked by: 15. Were all holding times able to be met? (if no, notify customer for authorization.) Special Handling (if applicable) NA 🗹 Yes 🗀 16. Was client notified of all discrepancies with this order? Date Person Notified: eMail Phone Fax In Person Via: By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp C Condition Seal Intact Seal No Seal Date Not Present Good

#### Air Bubbles (Y or N) **ANALYSIS LABORATORY** HALL ENVIRONMENTAL stories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report. 4901 Hawkins NE - Albuquerque, NM 87109 Fax 505-345-4107 www.hallenvironmental.com **Analysis Request** (AOV) 809S8 8081 Pesticides / 8082 PCB's Anions (F,CI,NO3,NO2,PO4,SO4) **3CRA 8 Metals** Tel. 505-345-3975 (SMIS 0728 to 0158) 2'HA9 (1.402 bodfeM) 803 (1.814 bodieM) H97 (ORM \ ORG \ DRO \ MRO) Remarks: OTEX + MTBE + TPH (Gas only) BTEX + MTBE + TMB's (8021) ∃i∄e HEAL No. Date □ Rush Preservative Sample Temperature: Sampler: M. Du Turn-Around Time: 'APLOT. LOM | Project Manager: Project Name: X Standard H Ch Container Type and # Received by Project #: On Ice: if necessary, samples submitted to Hall Environmental may be sub-☐ Level 4 (Full Validation) Sample Request ID Chain-of-Custody Record FOLD F WARK □ Other Matrix nail or Fax#: Mbal ailing Address: Time 1415 2:30 VQC Package: 215 930 EDD (Type) Time: creditation TIME: Standard NELAP Jate



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

February 05, 2016

Mike Butler EPCOR Water PO Box 370 Edgewood, NM 87015

TEL: (505) 228-6233

**FAX** 

RE: EWWTP OrderNo.: 1601A67

#### Dear Mike Butler:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/28/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

Artyl

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report Lab Order 1601A67

Date Reported: 2/5/2016

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: EPCOR Water Client Sample ID: Effluent

 Project:
 EWWTP
 Collection Date: 1/28/2016 10:30:00 AM

 Lab ID:
 1601A67-001
 Matrix: AQUEOUS
 Received Date: 1/28/2016 2:02:00 PM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
SM5210B: BOD					Analy	st: MRA
Biochemical Oxygen Demand	DO Depletion<2.0	2.0	mg/L	1	2/3/2016 4:40:00 PM	23479
SM 9223B FECAL INDICATOR	R: E. COLI MPN				Analy	st: SMS
E. Coli	<1	1.000	CFU/100ml	1	1/29/2016 5:09:00 PN	A 23468

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 3
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1601A67

05-Feb-16

**Client:** 

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-23479

SampType: MBLK

TestCode: SM5210B: BOD

%REC LowLimit

TestCode: SM5210B: BOD

Client ID:

PBW

Batch ID: 23479

RunNo: 31920

Prep Date: 1/29/2016 Analysis Date: 2/3/2016

PQL

SeqNo: 976513

Units: mg/L

HighLimit

**RPDLimit** 

Qual

Analyte **Biochemical Oxygen Demand**  Result ND

2.0

SampType: MBLK Batch ID: 23479

RunNo: 31920

Prep Date: 1/29/2016

Sample ID MB-23479

PBW

Analysis Date: 2/3/2016

SeqNo: 976514

Units: mg/L

Analyte

Client ID:

Result ND

SPK value SPK Ref Val %REC LowLimit **PQL** 

SPK value SPK Ref Val

HighLimit

**RPDLimit** %RPD

Qual

Biochemical Oxygen Demand

Sample ID LCS-23479

SampType: LCS

TestCode: SM5210B: BOD

%RPD

Client ID: LCSW

Result

Result

180

170

Batch ID: 23479

2.0

RunNo: 31920

Prep Date: 1/29/2016

Analysis Date: 2/3/2016

SeqNo: 976515

Units: mg/L

SPK value SPK Ref Val **PQL** 

%REC LowLimit 87.5

HighLimit 138 **RPDLimit** Qual

Biochemical Oxygen Demand

Analyte

Sample ID LCSD-23479

SampType: LCSD Batch ID: 23479

RunNo: 31920

TestCode: SM5210B: BOD

61

HighLimit

138

Prep Date: 1/29/2016

Client ID: LCSS02

%REC

Analysis Date: 2/3/2016

SeqNo: 976516

Units: mg/L

Qual **RPDLimit** 

Analyte

Biochemical Oxygen Demand

SPK value SPK Ref Val POL

198.0

198.0

91.8 0

LowLimit

61

%RPD 4.79

%RPD

Qualifiers:

D

Н

Value exceeds Maximum Contaminant Level.

Not Detected at the Reporting Limit ND

Sample Diluted Due to Matrix

RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix S

Holding times for preparation or analysis exceeded

Analyte detected in the associated Method Blank В

Ε Value above quantitation range

Analyte detected below quantitation limits J

P Sample pH Not In Range

RL

Reporting Detection Limit Sample container temperature is out of limit as specified Page 2 of 3

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1601A67

05-Feb-16

**Client:** 

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-23468

SampType: MBLK

TestCode: SM 9223B Fecal Indicator: E. coli MPN

Client ID: PBW

Batch ID: 23468

RunNo: 31818

Prep Date: 1/28/2016 Analysis Date: 1/29/2016

SeqNo: 973699

Units: CFU/100ml

HighLimit

Analyte

**PQL** 

SPK value SPK Ref Val %REC LowLimit

%RPD

**RPDLimit** 

Qual

E. Coli

1.000

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- ח Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits

Page 3 of 3

- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

#### Sample Log-In Check List

RoptNo: 1 Work Order Number: 1601A67 **EPCOR-EDGEWOOD** Client Name: Received by/date: 1/28/2016 2:02:00 PM Ashley Gallegos Logged By: 1/28/2016 2:31:53 PM **Ashley Gallegos** Completed By: Reviewed By: Chain of Custody No 🗆 Not Present Yes 🗌 1 Custody seals intact on sample bottles? No 🗆 Not Present Yes 🛂 2. Is Chain of Custody complete? Client 3. How was the sample delivered? Log In NA 🗌 No 🗀 Yes 🗹 4. Was an attempt made to cool the samples? NA 🗍 No 🗀 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗌 Vas V Sample(s) in proper container(s)? No 🔲 Yes V 7. Sufficient sample volume for indicated test(s)? No 🗆 Yes 🗸 8. Are samples (except VOA and ONG) properly preserved? NA L No 🗹 Yes | 9. Was preservative added to bottles? No VOA Visis V No 🗔 Yes 10.VOA vials have zero headspace? Yes 🗆 No 🗹 11. Were any sample containers received broken? # of preserved bottles checked No 🗍 for pH: Yes 🗹 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 Yes 🗹 13. Are matrices correctly identified on Chain of Custody? No 🔲 Yes 🔽 14, is it clear what analyses were requested? No 🗀 Checked by. Yes 🗹 15. Were all holding times able to be met? (if no, notify customer for authorization.) Special Handling (if applicable) Y#6 [] NA 🔀 No 🗀 16. Was client notified of all discrepancies with this order? Date Person Notified: 🔲 eMail 📋 Phone 🔲 Fax 🔲 In Person Via: By Whom Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No **Not Present** Good

	HALL ENVIRONMENTAL ANALYSTS LABODATODY		Styliotinienal.com Albuqueraue, NM 87109	505-345-4107	Request			-N	<i>7</i> 1 }}	/OA	AOV) -iməŝ	9083 (50) 0758 (	7 7 8									ly notated on the analytical report.
	HALL ENVI		www.nanetrinon 4901 Hawkins NE - Albuqu	10	Analysis	KO)	(SM	РН (( 1) (1) (1)	T + T()	19 ot 19 4 19 4 19 4	+ MTI Netho Metho (8310)	3TEX 1PH 8 1PH (N 2CRA 3CRA 3CRA 3CRA	3						Remarks:			This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Turn-Around Time:	以Standard □ Rush		FUUTY	Project #:			Mike K. A. C.	Batter	X Yes 🗆 No		ative	Type // PDI A107	100-						Received by: Date Time R	1128/11:20	Secended by: Date Time	iched to other accredited laboratories. This serves as notice of this pos
<b>Custody Record</b>	lient: EDLOF Waser		Address: アロスのメヌン	Edgewood NABMIS PR	hone# 505-228-6053	mail or Fax#: My Che Cog Lot COM Project Manager:	A/QC Package:  1 Standard	5	I NELAP   Other	I EDD (Type)	i i	Marin Sample Request 1D	8-16 1050 HA Butter 0						Relinguished	1:20 Miles of	Time: Reinquisned by:	If necessary, samples submitted to Hall Environmental may be subportfacted to other accredited laboratories.



LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 03, 2016

Mike Butler EPCOR Water PO Box 370 Edgewood, NM 87015

TEL: (505) 228-6233

**FAX** 

RE: Edgewood WWTP OrderNo.: 1602A27

#### Dear Mike Butler:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/24/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

artil

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

Lab Order 1602A27

#### Date Reported: 3/3/2016

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EPCOR Water** 

Client Sample ID: Effluent

Project: Edgewood WWTP

**Collection Date:** 2/24/2016 12:55:00 PM

Lab ID: 1602A27-001

Matrix: AQUEOUS Received Date: 2/24/2016 2:38:00 PM

Analyses	Result	PQL Qua	al Units	DF	Date Analyzed	Batch
SM5210B: BOD					Analy	st: MRA
Biochemical Oxygen Demand	DO Depletion<2.0	2.0	mg/L	1	3/1/2016 3:04:00 PM	23940
SM 9223B FECAL INDICATOR	t: E. COLI MPN				Analy	st: SRM
E. Coli	<1	1.000	CFU/100ml	1	2/25/2016 4:29:00 PM	M 23927

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 3
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A27

03-Mar-16

**EPCOR Water** Client: Edgewood WWTP Project:

Sample ID MB-23940 Client ID: PBW

SampType: MBLK

TestCode: SM5210B: BOD

Batch ID: 23940

RunNo: 32532

SPK value SPK Ref Val %REC LowLimit

Analysis Date: 3/1/2016 Prep Date: 2/25/2016

SeqNo: 995256

Units: mg/L

**HighLimit** 

%RPD

**RPDLimit** 

Qual

Biochemical Oxygen Demand Sample ID MB-23940

Prep Date: 2/25/2016

Result ND

Result

Result

170

150

SampType: MBLK

**PQL** 

2.0

TestCode: SM5210B: BOD

Batch ID: 23940

RunNo: 32532

Analysis Date: 3/1/2016

2.0

SeqNo: 995257

Units: mg/L

Qual

Analyte Biochemical Oxygen Demand

Analyte

Result ND

SPK value SPK Ref Val %REC LowLimit **PQL** 

198.0

**HighLimit** 

%RPD **RPDLimit** 

Client ID: LCSW

Client ID: PBW

Sample ID LCS-23940

SampType: LCS Batch ID: 23940

RunNo: 32532

61

LowLimit

138

Prep Date: 2/25/2016

Analysis Date: 3/1/2016

**PQL** 

2.0

SeqNo: 995258

77.5

TestCode: SM5210B: BOD

Units: mg/L

**RPDLimit** %RPD Qual **HighLimit** 

Biochemical Oxygen Demand Sample ID LCSD-23940

SampType: LCSD

TestCode: SM5210B: BOD RunNo: 32532

Analyte

Client ID: LCSS02

Batch ID: 23940

Prep Date: 2/25/2016

Analysis Date: 3/1/2016

SeqNo: 995259

Units: mg/L

Analyte

PQL

2.0

%REC

**HighLimit** 

%RPD

**RPDLimit** 

Biochemical Oxygen Demand

SPK value SPK Ref Val 0 198.0

SPK value SPK Ref Val %REC

86.1

LowLimit 61

138

10.5

Qual

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits J
- P Sample pH Not In Range

RL

Reporting Detection Limit Sample container temperature is out of limit as specified Page 2 of 3

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1602A27

03-Mar-16

Client:

**EPCOR Water** 

**Project:** 

Edgewood WWTP

Sample ID MB-23927

SampType: MBLK

TestCode: SM 9223B Fecal Indicator: E. coli MPN

Client ID: PBW

Batch ID: 23927

RunNo: 32444

Prep Date: 2/24/2016

Analysis Date: 2/25/2016

SeqNo: 992169

Units: CFU/100ml

Analyte

PQL

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit**  Qual

E. Coli

1.000

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 3 of 3



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

#### Sample Log-In Check List

RcptNo: 1 Work Order Number: 1602A27 FPCOR-EDGEWOOD Client Name: Received by/date: 2/24/2016 2:38:00 PM Joe Archuleta Logged By: 2/24/2016 3:29:23 PM Joe Archuleta Completed By: 02/24/16 @ 1626 Reviewed By: Chain of Custody No 🛚 Not Present Yes 🗌 1. Custody seals intact on sample bottles? Not Present 🔲 No 🗌 Yes 🔽 2. Is Chain of Custody complete? Client 3. How was the sample delivered? Log In NA [ No 🗌 Yes 🔽 4. Was an attempt made to cool the samples? NA 🗆 No 🗹 Yes 🗍 5. Were all samples received at a temperature of >0° C to 6.0°C Samples were collected the same day and chilled. No 🔲 Yes 🔽 6. Sample(s) in proper container(s)? No [ Yes 🔽 7. Sufficient sample volume for indicated test(s)? No LJ Yes 🗸 8. Are samples (except VOA and ONG) properly preserved? NA 🗆 No V Yes 🗌 9. Was preservative added to bottles? No VOA Viels 🔀 No 🗆 Yes [] 10.VOA vials have zero headspace? Yes 🗆 No 🗹 11, Ware any sample containers received broken? # of preserved bottles checked for pH: No L 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 Yes 🔽 13. Are matrices correctly identified on Chain of Custody? No 🗆 Yes 🗸 14, is it clear what analyses were requested? Checked by Yes 🗸 No 🗀 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) No 🗆 NA 🗹 Yes 🗍 16. Was client notified of all discrepancies with this order? Date Person Notified: CMail Phone Fax In Person Via: By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp C Condition Seal Intact Seal No Not Present Good

Chain-of-Custody Record	Tum-Around Time:	HAII FNVIRONMENTAL
ient: LOCO - Water	X Standard □ Rush	ANALYSTS LABORATORY
	٥	www.hallenvironmental.com
ailing Address: 70 Rox 370	= Japanes MJTF	4901 Hawkins NE - Albuquerque, NM 87109
242,2000 NN 87015	_ Project(#	
1068# 505-8/24/6/33		
nail or Fax#: Mouther Colemon Com	Project Manager:	(O4)
:a6e:	N	(SW)
Scaringricon Level 4 (Full Validation)		H (G
NELAP 🗆 Other	On Ice: Artes I No	(1.8 (1.8) (1.40) (1.40) (1.40) (1.40)
EDD (Type)	Temperature:	VOV I VO
4/1/2/cs4	7 7	98 (MTB 58 (MT
Date Time Matrix Sample Request ID	Container Preservative HEAL No.	EX + IEX + I
MET TO	1602 427	91 97 808 828 528
1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		7
i i		
Williams Reinforced Of	Received by:  Date Time	Remarks:
8 Y	M. 2/24/16 2:00	
Neindurated by.	Received by Lime	
14/6/1458 11/11	July 1 1/439	
if necessary, samples submitted to Hall Environmental may be subx	contracted to other accredited laboratories. This serves as notice of this p	if necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratones. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 31, 2016

Mike Butler EPCOR Water PO Box 370 Edgewood, NM 87015

TEL: (505) 228-6233

**FAX** 

RE: EWWTP OrderNo.: 1603754

#### Dear Mike Butler:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

#### Analytical Report Lab Order 1603754

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2016

**CLIENT: EPCOR Water** 

Client Sample ID: Effluent

Project: EWWTP

TP Collection Date: 3/15/2016 8:30:00 AM

Lab ID: 1603754-001

Matrix: AQUEOUS Received Date: 3/15/2016 1:55:00 PM

Analyses	Result	PQL Q	ual	Units	DF	Date Analyzed	Batch
SM5210B: BOD	· · · · ·					Analys	t: MRA
Biochemical Oxygen Demand	DO Depletion<2.0	2.0		mg/L	1	3/21/2016 3:13:00 PM	24279
SM 9223B FECAL INDICATOR	: E. COLI MPN					Analys	t: MRA
E. Coli	<1	1.000		CFU/100ml	1	3/16/2016 5:28:00 PM	24263
EPA METHOD 300.0: ANIONS						Analys	t: LGT
Chloride	220	10		mg/L	20	3/16/2016 3:27:40 AM	R32825
SM2540C MOD: TOTAL DISSO	LVED SOLIDS					Analys	t: KS
Total Dissolved Solids	791	20.0	*	mg/L	1	3/18/2016 4:13:00 PM	24296
SM 4500 NORG C: TKN						Analys	t: CJ\$
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/28/2016 2:21:00 PM	24444

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1603754

31-Mar-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBW

Batch ID: R32825

RunNo: 32825

Prep Date:

Analysis Date: 3/15/2016

SeqNo: 1005999

Units: mg/L

**RPDLimit** 

Qual

Analyte

Result ND

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

Chloride

SampType: LCS

TestCode: EPA Method 300.0: Anions

Sample ID LCS Client ID: LCSW

Batch ID: R32825 Analysis Date: 3/15/2016

0.50

RunNo: 32825

Units: mg/L

SeqNo: 1006000

LowLimit

Analyte

Prep Date:

Result

SPK value SPK Ref Val

%REC

HighLimit

%RPD

90

110

Qual

Chloride

0.50

4.8

5.000

96.9

**RPDLimit** 

Qualifiers:

S

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

J

E Value above quantitation range

Sample container temperature is out of limit as specified

P Sample pH Not In Range

Reporting Detection Limit RL

Analyte detected below quantitation limits Page 2 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1603754

31-Mar-16

Client: **EPCOR Water EWWTP** Project:

Sample ID MB-24279

SampType: MBLK

TestCode: SM5210B: BOD

Client ID: PBW Batch ID: 24279

RunNo: 32961

Prep Date: 3/16/2016 Analysis Date: 3/21/2016

2.0

SeqNo: 1010973

Units: mg/L

%RPD

%RPD

Analyte

Client ID:

Analyte

Result PQL

ND

SPK value SPK Ref Val %REC LowLimit

HighLimit

**RPDLimit** 

Qual

Biochemical Oxygen Demand Sample ID MB-24279

SampType: MBLK Batch ID: 24279

TestCode: SM5210B: BOD RunNo: 32961

Prep Date: 3/16/2016

PBW

Analysis Date: 3/21/2016

SeqNo: 1010974

%REC LowLimit

Units: mg/L **HighLimit** 

**RPDLimit** 

Qual

Biochemical Oxygen Demand

Result **PQL** ND 2.0

SampType: LCS TestCode: SM5210B: BOD

SPK value SPK Ref Val

198.0

198.0

Sample ID LCS-24279 Client ID: LCSW

Batch ID: 24279

RunNo: 32961

Prep Date: 3/16/2016

Analysis Date: 3/21/2016

210

Result

200

SeqNo: 1010975

Units: mg/L

%RPD

Analyte

Result PQL

%REC SPK value SPK Ref Val LowLimit

HighLimit

**RPDLimit** Qual

Biochemical Oxygen Demand

SampType: LCSD

TestCode: SM5210B: BOD

Client ID: LCSS02

Biochemical Oxygen Demand

Sample ID LCSD-24279

Batch ID: 24279

RunNo: 32961

Prep Date: 3/16/2016

Analysis Date: 3/21/2016

SeqNo: 1010976

Units: mg/L

138

Analyte

POL

2.0

SPK value SPK Ref Val %REC

LowLimit HighLimit

%RPD 3.68

**RPDLimit** 

20

Qual

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits

В

Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 3 of 6

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Qualifiers:

S % Recovery outside of range due to dilution or matrix

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1603754

31-Mar-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-24263

SampType: MBLK

TestCode: SM 9223B Fecal Indicator: E. coli MPN

Client ID: **PBW** 

Batch ID: 24263

RunNo: 32890

Prep Date: 3/15/2016

Analysis Date: 3/16/2016

SeqNo: 1008245

Units: CFU/100ml

Qual

Analyte

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

**RPDLimit** 

E. Coli

1.000

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix S
- Analyte detected in the associated Method Blank
- Ε Value above quantitation range
- J Analyte detected below quantitation limits
- Sample pH Not In Range P
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Page 4 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1603754

31-Mar-16

Client:

**EPCOR Water** 

Project:

Analyte

**EWWTP** 

Sample ID MB-24296

SampType: MBLK

TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: PBW

Batch ID: 24296

RunNo: 32903

Prep Date: 3/17/2016

Analysis Date: 3/18/2016

PQL

SeqNo: 1008504

%REC LowLimit

Units: mg/L

%RPD **RPDLimit** 

Qual

**Total Dissolved Solids** 

ND 20.0

Sample ID LCS-24296

SampType: LCS

Result

TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: LCSW Batch ID: 24296

RunNo: 32903

SeqNo: 1008505

Units: mg/L

**HighLimit** 

Analyte

Prep Date: 3/17/2016

Analysis Date: 3/18/2016

SPK value SPK Ref Val

SPK value SPK Ref Val

%REC LowLimit

HighLimit

**RPDLimit** 

Result PQL

1000

101

**Total Dissolved Solids** 

1010

20.0

0

120

%RPD

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

Page 5 of 6

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1603754

31-Mar-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-24444

SampType: MBLK

TestCode: SM 4500 Norg C: TKN

TestCode: SM 4500 Norg C: TKN

Client ID:

**PBW** 

Batch ID: 24444

RunNo: 33113

Prep Date: 3/25/2016

Analysis Date: 3/28/2016

SeqNo: 1016268

Units: mg/L

**RPDLimit** 

Qual

Analyte

Result

**PQL** SPK value SPK Ref Val %REC LowLimit 1.0

HighLimit

%RPD

Nitrogen, Kjeldahl, Total

ND

SampType: LCS

Prep Date: 3/25/2016

Batch ID: 24444

RunNo: 33113

Analysis Date: 3/28/2016

SeqNo: 1016269

%REC LowLimit

Units: mg/L HighLimit

Analyte

Sample ID LCS-24444

LCSW

PQL Result

SPK value SPK Ref Val

101

%RPD

1.0 10.00 0

Client ID:

120

Qual

Nitrogen, Kjeldahl, Total

**RPDLimit** 

Qualifiers:

Н

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix S

Analyte detected in the associated Method Blank В

Sample container temperature is out of limit as specified

Ε Value above quantitation range

Analyte detected below quantitation limits J

P Sample pH Not In Range

Reporting Detection Limit RL

Page 6 of 6



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

### Sample Log-In Check List

Recoived byristite:    Logged By:   Lindsay Mahgin   3/15/2016 1:5:50 PM	Client Name:	EPCOR-EDGEWOOD	Work Order Number:	1603754		RoptNo:	
Logged By: Lindsay Mahgin 3/15/2016 1:55:00 PM  Completed By: Lindsay Mangin 3/15/2016 2:16:53 PM  Reviewed By:		od					
Completed By: Lindsay Mangin 3/15/2016 2:18:53 PM  Reviewed By:	Received by/da	ite:	03/15/16	···	. #		·
Chelin of Custody   1. Custody   23   5   1.0	Logged By:	Lindsay Mahgin	3/15/2016 1:55:00 PM		Judy Hay Do		
1. Custody seals intact on sample bottles?   Yes   No   Not Present	Completed By:	Lindsay Mangin	3/15/2016 2:18:53 PM		of the state of		ļ
Custody seals intact on sample bottles?   Yes   No   Not Present	Reviewed By:	An D	3/15/10	143D			
1. Custody seals intact on sample bottles? 2. Is Chain of Custody complete? 3. How was the sample delivered?    Client	Chain of Cus	• 10 Kill	313113	<u> </u>			<u></u> .
2. Is Chain of Custody complete?  3. How was the sample delivered?    Client	•		s?	Yes 🗆	No 🗆	Not Present 🗹	
4. Was an attempt made to cool the samples?  Yes No No NA				Yes 🗹	No 🗆	Not Present	
4. Was an attempt made to cool the samples?  Yes  No  No  NA    5. Were all samples received at a temperature of >0"C to 6.0"C  Yes  No  No  NA    6. Sample(s) in proper container(s)?  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?  10. VOA vials have zero headspace?  11. Were any sample containers received broken?  12. Does paperwork match bottle labels?  (Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  Yes  No  Adjusted?  15. Were all holding times able to be met?  (If no, notify customer for authorization.)  Special Handling (if applicable)  16. Was client notified: Date  By Whom: Via: eMail Phone Fax In Person  Regarding: Client Instructions:  17. Additional remarks:  18. Cooler Information  Cooler No Temp *C Condition Seal Intact Seal No Seal Date Signed By	3. How was th	e sample delivered?		Client			
4. Was an attempt made to cool the samples?  Yes  No  No  NA    5. Were all samples received at a temperature of >0"C to 6.0"C  Yes  No  No  NA    6. Sample(s) in proper container(s)?  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?  10. VOA vials have zero headspace?  11. Were any sample containers received broken?  12. Does paperwork match bottle labels?  (Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  Yes  No  Adjusted?  15. Were all holding times able to be met?  (If no, notify customer for authorization.)  Special Handling (if applicable)  16. Was client notified: Date  By Whom: Via: eMail Phone Fax In Person  Regarding: Client Instructions:  17. Additional remarks:  18. Cooler Information  Cooler No Temp *C Condition Seal Intact Seal No Seal Date Signed By	Log In						
6. Sample(s) in proper container(s)?  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?  10. VOA vials have zero headspace?  11. Were any sample containers received broken?  12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  15. Were all holding times able to be met? (If no, notify customer for authorization.)  Special Handling (if applicable)  16. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding: Client Instructions:  17. Additional remarks:  18. Cooler Information Cooler No Temp **C Condition Seal Intact Seal No Seal Date Signed By  No   No   No   No   No   No   No   No	<del></del>	empt made to cool the san	nples?	Yes 🗹	No 🗆	na 🗆	
7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?  10. VOA vials have zero headspace?  11. Were any sample containers received broken?  12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  15. Were all holding times able to be met? (If no, notify customer for authorization.)  Special Handling (if applicable)  16. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding: Client Instructions:  17. Additional remarks:  18. Cooler Information Cooler No   Temp °C   Condition   Seal Intact   Seal No   Seal Date   Signed By	5. Were all sa	imples received at a tempe	rature of >0° C to 6.0°C	Yes 🗹	No 🗀	na 🗆	
8. Are samples (except VOA and ONG) properly preserved? 9. Was preservative added to bottles? 10. VOA vials have zero headspace? 11. Were any sample containers received broken? 12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) 13. Are matrices correctly identified on Chain of Custody? 14. Is it clear what analyses were requested? 15. Were all holding times able to be met? (If no, notify customer for authorization.)    Special Handling (If applicable)	6. Sample(s)	in proper container(s)?		Yes 🗹	No 🗆		
9. Was preservative added to bottles?  Yes No	7, Sufficient s	ample volume for indicated	test(s)?	Yes 🗹	No 🗆		
10. VOA vials have zero headspace?  11. Were any sample containers received broken?  12. Does papenwork match bottle labels? (Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  15. Were all holding times able to be met? (If no, notify customer for authorization.)    Special Handling (If applicable)	8. Are sample	s (except VOA and ONG)	properly preserved?	Yes 🗹	No 🗌		
11. Were any sample containers received broken?  Yes No # of preserved bottles checked for pH:  (Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  Yes No Adjusted?  15. Were all holding times able to be met?  (If no, notify customer for authorization.)  Special Handling (if applicable)  16. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding:  Client Instructions:  17. Additional remarks:  18. Cooler Information  Cooler No Temp C Condition Seal Intact Seal No Seal Date Signed By	9. Was prese	rvative added to bottles?		Yes 🗌	No 🗹	NA 🗆	
11. Were any sample containers received broken?  Yes No # of preserved bottles checked for pH:  (Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  15. Were all holding times able to be met?  (If no, notify customer for authorization.)  Special Handling (If applicable)  16. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding:  Client Instructions:  17. Additional remarks:  18. Cooler Information  Cooler No Temp C Condition Seal Intact Seal No Seal Date Signed By  # of preserved bottles # of preserved bottles checked / for pH:  # of preserved has a pres	10.VOA vials t	nave zero headspace?		Yes 🔲	No 🗆	No VOA Vials 🗹	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  15. Were all holding times able to be met? (If no, notify customer for authorization.)  Special Handling (If applicable)  16. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding:  Client Instructions:  17. Additional remarks:  18. Cooler No Temp C Condition Seal Intact Seal No Seal Date Signed By  bottles checked for pH:  bottles checked for pH:  cooler No Determines noted)  Adjusted?  No Adjusted?  No Checked by:  Adjusted?  No Checked by:  Adjusted?  No Determines noted)			I broken?	Yes	No 🗹		
(Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody? Yes V No Adjusted? Vi)  14. Is it clear what analyses were requested? Yes No Checked by:  15. Were all holding times able to be met? (If no, notify customer for authorization.)    Checked by:   C					_		
13. Are matrices correctly identified on Chain of Custody?  14. Is it clear what analyses were requested?  15. Were all holding times able to be met? (If no, notify customer for authorization.)  Special Handling (If applicable)  16. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding:  Client Instructions:  17. Additional remarks:  18. Cooler Information  Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By			4.3	Yes 🗹	No 📙		>12 unless noted)
14. Is it clear what analyses were requested?  15. Were all holding times able to be met? (If no, notify customer for authorization.)  Special Handling (if applicable)  16. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding:  Client Instructions:  17. Additional remarks:  18. Cooler Information  Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By	•	•		Yes <b>✓</b>	No 🗆	$\sim$	_ <i>N</i> o
15. Were all holding times able to be met? (If no, notify customer for authorization.)    Special Handling (If applicable)		•			No 🗌		
Person Notified:  By Whom:  Regarding:  Client Instructions:  17. Additional remarks:  18. Cooler Information  Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By	15. Were all ho	olding times able to be met	?	Yes 🔽	No 🗆	Checked by:	Jr
Person Notified:  By Whom:  Regarding:  Client Instructions:  17. Additional remarks:  18. Cooler Information  Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By	Special Han	dling (if applicable)					
By Whom: Via:eMailPhoneFaxIn Person  Regarding:			s with this order?	Yes 🗌	No 🗆	NA 🗹	
By Whom: Via:eMailPhoneFaxIn Person  Regarding:	Pers	on Notified:	Date				•
Regarding: Client Instructions:  17. Additional remarks:  18. Cooler Information Cooler No Temp °C   Condition   Seal Intact   Seal No   Seal Date   Signed By				☐ eMail ☐	Phone Fax	☐ In Person	
17. Additional remarks:  18. <u>Cooler Information</u> Cooler No   Temp °C   Condition   Seal Intact   Seal No   Seal Date   Signed By	-						:
18. Cooler Information Cooler No   Temp °C   Condition   Seal Intact   Seal No   Seal Date   Signed By	Clien	t Instructions:		,			
Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By	17. Additional	remarks:		,			
Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By	18. Cooler In	formation					
1 3.3 Good Not Present		No Temp C Conditio		Seal Date	Signed By		
	1	3.3 Good	Not Present				

	ANALYSIS LABORATORY '	ental.com	4901 Hawkins NE - Albuquerque, NM 87109		Analy	os (	(SMIS	2808 20N 3020 (1)	.81. .604. .28 · .20 · .20 ·	77 (\frac{1}{2})	orth Orth Orth Orth Orth Orth Orth	TPH 8019 TPH (Me 8260B (Ve										ny sub-contracted data will be clearly notated on the analytical report.
			4901	Tel		ίμο	(Gas	Hd.	L +	38	ΤN	BTEX + <i>N</i>								Remarks:		osstbility. Ar
Turn-Around Time:	X Standard 🗆 Rush	Project Name:	twin r	Project #:			MIKEBUTTER	Sampler W. Buth	Z Yes □ No	Sample Temperature: -2,2		Container Preservative HEAL No.  Type and # Type	WALICS -201	) )						Date Time Time	Received by:	if necessary, samples submitted to Half Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
dy Record	lient Excor Water		ailing Address: PO BOX 370	Z	28 623	That or Fax#: // Cold // // Cold Manager.	A/QC Package: Standard □ Level 4 (Full Validation)	ь	NELAP □ Other	EDD (Type)		Date Time Matrix Sample Request ID	568:30 AB Ethlent	-						Solution Relinquished By:	late: Time: Relinquished by:	if necessary, samples submitted to Haff Environmental may be subt

		• •



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 1603D40

April 12, 2016

Mike Butler

**EPCOR** Water

**PO Box 370** 

Edgewood, NM 87015

TEL: (505) 228-6233

**FAX** 

RE: EWWTP

Dear Mike Butler:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/28/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="https://www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

Bulse

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report Lab Order 1603D40

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/12/2016

CLIENT: EPCOR Water Client Sample ID: Effluent

 Project:
 EWWTP
 Collection Date: 3/28/2016 10:30:00 AM

 Lab ID:
 1603D40-001
 Matrix: AQUEOUS
 Received Date: 3/28/2016 2:15:00 PM

Analyses	Result	PQL Qua	l Units	DF	Date Analyzed	Batch
SM5210B: BOD		_			Analys	t: MRA
Biochemical Oxygen Demand	DO Depletion<2.0	2.0	mg/L	1	4/4/2016 11:07:00 AM	24506
SM 9223B FECAL INDICATOR	: E. COLI MPN				Analys	t: tnc
E. Coli	<1	1.000	CFU/100ml	1	3/29/2016 4:54:00 PM	24475
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Nitrogen, Nitrite (As N)	ND	0.10	mg/L	1	3/28/2016 6:51:02 PM	R33136
Nitrogen, Nitrate (As N)	1.2	0.10	mg/L	1	3/28/2016 6:51:02 PM	R33136

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 4
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

Result

WO#: 1603D40

12-Apr-16

**EPCOR Water** Client: Project: **EWWTP** 

Analyte

TestCode: EPA Method 300.0: Anions Sample ID MB SampType: MBLK

Batch ID: R33136 Client ID: PBW SeqNo: 1017429 Units: mg/L

Analysis Date: 3/28/2016 Prep Date: Qual %RPD **RPDLimit** HighLimit %REC LowLimit SPK value SPK Ref Val

RunNo: 33136

ND 0.10 Nitrogen, Nitrite (As N) ND 0.10 Nitrogen, Nitrate (As N)

PQL

TestCode: EPA Method 300.0: Anions SampType: LCS Sample ID LCS

RunNo: 33136 Client ID: LCSW Batch ID: R33136

Units: mg/L SeqNo: 1017431 Prep Date: Analysis Date: 3/28/2016

%RPD **RPDLimit** Qual SPK value SPK Ref Val %REC LowLimit HighLimit Result **PQL** Analyte 90 110 94.3 0.94 0.10 1.000 0 Nitrogen, Nitrite (As N) 90 110 2.500 0 102 2.5 0.10 Nitrogen, Nitrate (As N)

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix S
- Analyte detected in the associated Method Blank В
- Value above quantitation range E
- Analyte detected below quantitation limits J
- Sample pH Not In Range P
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Page 2 of 4

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1603D40

12-Apr-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-24506

SampType: MBLK

TestCode: SM5210B: BOD

%REC LowLimit

Client ID: PBW

Batch ID: 24506

RunNo: 33268

Prep Date:

PQL

3/30/2016

Analysis Date: 4/4/2016

SeqNo: 1021885

Units: mg/L

Analyte

**HighLimit** 

**RPDLimit** Qual

**Biochemical Oxygen Demand** 

Sample ID MB-24506

2.0 SampType: MBLK

TestCode: SM5210B: BOD

Client ID: PBW

Batch ID: 24506

RunNo: 33268

SeqNo: 1021886

Units: mg/L

Analyte

Prep Date: 3/30/2016 Analysis Date: 4/4/2016

Result

%RPD

%RPD

**Biochemical Oxygen Demand** 

Analyte

Result ND

Result

160

140

PQL

SPK value SPK Ref Val

SPK value SPK Ref Val

SPK value SPK Ref Val

198.0

198.0

%REC LowLimit

TestCode: SM5210B: BOD

HighLimit

**RPDLimit** 

Qual

Sample ID LCS-24506

Client ID: LCSW

Prep Date: 3/30/2016

Batch ID: 24506

SampType: LCS

Analysis Date: 4/4/2016

**PQL** 

2.0

RunNo: 33268

SeqNo: 1021887

LowLimit

Units: mg/L HighLimit

%RPD **RPDLimit** 

Qual

Qual

**Biochemical Oxygen Demand** Sample ID LCSD-24506

Client ID: LCSS02

SampType: LCSD

Batch ID: 24506

2.0

2.0

TestCode: SM5210B: BOD RunNo: 33268

%REC

79.4

Units: mg/L

**RPDLimit** 

Analyte **Biochemical Oxygen Demand** 

Prep Date:

3/30/2016

Analysis Date: 4/4/2016 Result **PQL** 

SPK value SPK Ref Val 0

%REC LowLimit

SeqNo: 1021888

61

HighLimit 138

8.98

%RPD

20

Value exceeds Maximum Contaminant Level.

Н Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits В

Ε Value above quantitation range Analyte detected below quantitation limits

Page 3 of 4

Sample pH Not In Range RLReporting Detection Limit

Sample container temperature is out of limit as specified

Qualifiers:

D Sample Diluted Due to Matrix

ND Not Detected at the Reporting Limit

% Recovery outside of range due to dilution or matrix S

Analyte detected in the associated Method Blank

P

#### Hall Environmental Analysis Laboratory, Inc.

Result

WO#: 1603D40

12-Apr-16

Client:

**EPCOR Water** 

Project:

**EWWTP** 

Sample ID MB-24475

SampType: MBLK

TestCode: SM 9223B Fecal Indicator: E. coli MPN

Batch ID: 24475

RunNo: 33145

Client ID: PBW

Prep Date: 3/28/2016

Analysis Date: 3/29/2016 **PQL** 

SeqNo: 1017685

SPK value SPK Ref Val %REC LowLimit

Units: CFU/100ml

HighLimit

%RPD

**RPDLimit** Qual

Analyte E. Coli

<1 1.000

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded Н

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range Ε

Analyte detected below quantitation limits J

Sample pH Not In Range P

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

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